

Remarks on the ERA Economics for Seroe Colorado Golf Development

Sam Cole, Aruba. 12-12-04.

Important Caveat

It is recognized that the ERA document describing their contribution to the Sasaki Associates “Sunrise Coast Master Planning” effort is preliminary and illustrative and the results are not to be considered sufficient for a detailed investment analysis of the Master Plan. The following equally illustrative remarks are designed to improve the precision of analysis and appropriateness of the proposed Sasaki Plan projects to the Aruba Framework for Sustainable Tourism. The remarks cover the following areas

- Relevance of Proposal to the Framework
- Implications for Migration and Population Growth
- Technical Aspects of the Analysis
- A Modified Calculation of Hotel Viability

This note also includes charts comparing the implications of all current trends from 2000 to 2070 based on current hotel development versus the guidelines for Sustainable Tourism.

The main conclusions are:

- The ERA calculation of performance of the proposed hotel properties and golf resort is unnecessarily arbitrary and appears to bear little or no relation to Aruba as a destination or to existing properties in Aruba.
- The high threshold for the golf resort demands a very rapid development that could raise the Island population by from 10-20 thousand over the next few years.
- There are much better alternatives for Aruba that follow the principles, vision, scale of development, and timetable laid out in the Aruba Framework for Sustainable Tourism.

Overall, the illustrative calculations here suggest that ERA/Sasaki should rethink the focus, scale, composition, costing, and timing of their proposals.

1. Adaptation to Fit with the Framework

The ERA/Sasaki proposal - at least as described in the ERA document – does not fit well with the Framework as described in the 2003 NTC report. Nor does it correspond with the desires of the local population as expressed in focus groups or in interviews prior to the preparation the Framework.

- The increase in population over the next few years as a result of the proposed development – upwards to 18 thousand - is close to the entire population growth indicated in the Framework over the next 40-50 years, even excluding the possibility of procreation by some of the new residents.
- The development provides homes for about 3 thousand residents out of the total new population. The other 12 thousand new residents will require about 3-5 thousand homes (depending on the ambiguities mentioned above), presumably on land outside the proposed development. Some serious consideration needs to be given to this since residential and related land use was shown in the Framework to be the primary factor driving the Island to its carrying capacity.
- The number of migrants will be increased if the project is concurrent with other new developments proposed for the Island since the proportion of jobs taken by migrants could rise even further – conceivably to over 90%. It might be reduced considerably through dramatically improved labor productivity, spreading development over an extended period and so on. The Framework provides several examples of this.
- Conceivably, the level of immigration could be reduced somewhat if underemployed and unregistered workers could be brought into the labor pool but this would involve training and new legislation that might take several years. Moreover, the number of people actually available and who are not already

unofficially employed is not known. It should be possible to estimate this number from CBS, Labor Department, and Social Affairs, and other available statistics.

- ERA imply (p14) that resort homes will be occupied only 10% of the time. Given that residential land is at a premium – to have homes occupied only 1 month per year is a very poor use of the Island’s scarcest asset. Moreover, this low “occupancy” dramatically reduces the downstream income generating capacity of the enterprise as a whole, but relieving some of the indirect pressure on land use.
- The calculations are quite sensitive to the assumptions made about these expatriate residents, as would be complete estimates of net public income. As noted elsewhere the 2001 NTC Report indicated that such developments were unlikely to make an overall significant net contribution to public finances. To obtain greater clarity on this matter the experience with residents of Tierra del Sol should be assessed. One suggestion made for the Framework was that expatriate residence should be more closely coupled with other profitable tertiary activities such as elderly and cosmetic care that would subsidize Aruban health services.
- A working assumption for ERA/Sasaki appears to be that increased immigration as beneficial to a community. This indeed is often the case for mainland or impoverished communities (e.g. respectively Florida or Cancun). Immigration also clearly has been tremendously valuable for Aruba and many projects could not proceed without workers from abroad. However, a goal of the Framework is to try to achieve economic development with a significant reduction in influx of new migrants in order to reduce the rate at which Aruba approaches its carrying capacity whilst still providing Arubans with maximum benefit from new and existing projects. Here, ERA/Sasaki appear to have completely missed the point.

- The justification that “golf resorts are a proven strategy for tourism development in the Caribbean” is a pretty weak case for such a major investment.¹ The experience of golf courses already in Aruba should provide valuable insights as to market, costing, operations, environmental challenges, etc.
- From the point of view of the Framework the fundamental problem is that the golf development seems to demand a threshold of 36 holes that they translate into over 1000 rooms. ERA call this the “threshold of critical mass” for such a resort (p3). This means that much of the project must be completed over a rather short period and limits the possibility for phasing the project to reduce the overall impacts. (No timetable is specified with the ERA Report.)
- If 36 holes really is the “threshold of critical mass” for a golf development then an alternative to reach that level in Aruba is to creatively expand Divi to 18 holes and designate one of the proposed expansions on Eagle Beach as a golf hotel.
- As a conference hotel the Island might re-use the under-used properties (such as a s Brickel Bay) with an extension in association with a neighboring hotel (such as Marriott/Radison/Hyatt/Holiday Inn). This area is probably a more attractive location for the booming academic conference market.
- The specification of the “Boutique” hotel described by ERA appears to be inconsistent in terms of price and investment (see next section). Since there are developers in Aruba who have proposed, and are prepared to make investments, such hotels, it would be sensible to discuss costing, etc. with them? Judging from the room-price of the ERA/Sasaki version, it appears to be a chain-based Trophy or Ultra hotel, rather than the style of hotel envisaged in the Framework.²

¹ I attach a paper on golf economics in Florida that shows just how variable this can be.

² The ERA boutique hotel proposal appears to be based on large properties under development by major chains (for example, in Puerto Rica) that take the “boutique” name but are largely modifications to existing generic products, and that to date have been only marginally successful.

- At the rate indicated by the Framework of not more than 50-100 rooms a year the development would have to be spread over more than 10 years (see e.g. Figure 11 in the 2004 report for the year by year profile).
- The timeframe for development is not stated but the introduction implies that the “development deal” is an irreducible integrated package. (p2) so developers would not/could not spread development over this timeframe.
- It would be far better to ramp up tourism in Seroe Colorado using a series of smaller and less investment-intensive boutique style hotels³. These could be associated with activities that build on the existing natural and cultural heritage. For example, horse riding along the back of the island has expanded greatly in recent years reflecting the popularity of equestrianism in the US and other markets. This and similar activities could be expanded incrementally alongside smaller hotels and increments in accommodation.
- Once the level of accommodation has reached (say) 500 rooms, then it would make sense to begin development of the golf course and a dedicated golf hotel, say, in two stages of about 200 units. By this time new tourist businesses - restaurants, tours, taxis, etc would be in place in San Nicolas. This would be much more likely to create local income, entrepreneurship, revenues, regional development, etc, and be more compatible with the goals of the Framework.

³ The National Hotel Executive magazine (Jan 2005) reports that in the past five years alone, boutique hotels' share of supply, demand and revenue increased significantly as compared to relation to other luxury hotels (citing Smith Travel Research). Small hotels are a phenomenon in the marketplace – even with limited marketing budgets, in many instances, they are out-performing their larger counterparts. The magazine also explains that boutique hotel owners who want to preserve their one-of-a-kind properties can successfully operate their hotels as independent properties without aligning themselves with a recognizable brand name. The Internet has leveled the playing field thus increasing independent hotels' visibility with travelers. Boutique properties are more service-minded, with a different sort of culture. In the boutique hotel, guests often sleep in, and the general pace is slower and more relaxed. Rooms are unique from room-to room and often require a higher degree of service. Moreover, over the period 1995-2000, US overall hotel occupancy dropped from 65.1% to 63.5%, whilst US boutique hotels experienced an occupancy growth from 69% to 73% .

- The proposal, as it stands (based on the ERA document), sounds like an enclave development suitable in the Dominican Republic or Jamaica, or Florida, but not really suitable for Aruba, and quite a long way from the ideas discussed with the NTC and incorporated in the Framework.

In many respects the ERA/Sasaki proposal for development of Seroe Colorado represents a continuation of past policies. Combined with other current proposals that are “under consideration” there is likely to be a dramatic increase in population in Aruba over the short- and medium-term that will, over the longer term, lead to the need for crisis measures to overcome the chronic unemployment after 2030 originating from rapid immigration during 2005-2015. The contrast between this outcome and the much slower and smoother trends arising from implementation of the Framework for Sustainable Tourism in Aruba when tourism growth is matched to Aruban needs and labor force growth are given in Figures 1 to 4.⁴

The Sasaki/ERA proposal for Seroe Colorado is large – sufficient to promote rapid population growth, just as the rapid growth of the oil refinery after 1930 and later by the threefold expansion of tourism. New population is “pumped” onto the Island whenever the number of jobs created by an expansion far exceeds the number of willing and able unemployed workers. As explicated by the Framework this is generally the case with the construction of new large scale hotel properties in Aruba each of which can lead directly and indirectly to the creation of several thousand new jobs (approximately 4 jobs per room in total). The natural growth of the labor force (i.e. arising from the resident population) is around one percent of the population, or less than 1000 per year (of whom less than half will work in the tourism industry). The Framework matches tourism growth to this labor supply.

2. Potential Employment (ERA Table 6) and Migration (ERA Table 12).

⁴ The trends are calculated using the tourism-economic-demographic model described in the 2003 Framework Report.

This section considers the ERA estimates of employment and migration.

The Multiplier used by ERA (2 indirect jobs for 1 hotel job) seems low for these up-market hotels – a better average figure for this mix (based on room rates) is $1.2 + 3$ giving a total of 4.2 jobs induced by each new room. These figures are estimated in the 2001/2002 NTC Reports. For the upscale hotels proposed, the employment may be somewhat higher. Using the higher multiplier suggests total new tourist-induced jobs to be 4,611, some 1,300 more than ERA suggest.

Also ERA neglect to include the jobs induced by the new residents who will create employment (domestics, retail, and other household expenditures).

Assuming all the accommodation is taken by new comers this could create up to 4,031 jobs (direct and indirect). These are workers who will “service” the homes (as opposed to the people who will live in them). This illustrative estimate of the induced employment is based on expected incomes for people who can afford to buy these homes and the average household income propensity to spend and the resulting job creation per \$1million of household expenditure in Aruba. The actual amount will depend on the profile of new residents and the amount of time they spend on the Island. For sake of illustration an average 10-month average occupancy is assumed for homes, condos, and timeshare. The combined total permanent job creation (i.e. excluding construction) may be as much as 8,642 jobs.

ERA suggest that 70% of jobs will be taken by new migrants, with 2,330 immigrants based on 3,329 total jobs. (ERA Table 12). My own calculation based on 3,329 jobs and 4,000 unemployed suggests that this share would be somewhat less 60-65% depending on training and hiring policy.⁵ However, if 8,642 new jobs are created then the migrant share rises to around 80% rate requiring about 6,889 new immigrant workers.

⁵ This estimate is based on matching jobs created by sector and occupation to unemployment by sector and occupation and period since last regular job as described in the Framework.

A proportion of migrant workers bring family members. For illustrative purpose we assume that each migrant worker results in 1.5 new residents, some 10,334 new residents associated with hotel operations and servicing new home. Even if immigration policy changes so that foreign workers are “recycled”, the population of the Island will be permanently increased by this amount.⁶

People will live in the new homes proposed by ERA. For present purposes we assume that all are new comers to the Island (retirees, second homes, and so on) since this is appears to be the assumption made by ERA in their revenue calculations (see below). Each of the 1,331 new homes has an average of 2.5 residents the permanent population of the Island increases by 3,328. (Since these homeowners are retirees or second homeowners they are assumed to not to be working on the Island.)

ERA do not account for the settlement of temporary migrant construction workers. Using the ERA figure of 600 workers to complete the first phase of the hotel project (assumed here to be 60% of the entire hotel-golf resort), indicates that 3,428 construction workers would be required in total, of whom about 80% might be migrants. Of these at least 25% might be expected to settle on the islands, some with family members. This brings another 1,225 permanent residents.

Development of new infrastructure associated with the project will also generate employment and induce some additional migration and settlement. ERA cite Sasaki Associates estimate that \$10.2 million will be required for the infrastructure associated with the development. This excludes new access roads, utilities, and other infrastructure. ERA report do not account for the labor demand for new infrastructure projects associated with the project. It is also reasonable to associate these infrastructure projects in San Nicholas and the construction employment as part of the impact since they are required to make the resort viable. For illustrative purposes the total cost is taken (possibly conservatively) to be \$100 million.

⁶ As shown in the Framework, changing policy to limit the length migrant visas will reduce longer-term population growth.

Earlier it was assumed that 20% of jobs are taken by local workers (i.e. Arubans and migrants who are already settled on the island). This figure is based on the apparent requirement of the ERA Sasaki plan that the entire project must be completed over a fairly short time frame and a current unemployment level of 4,000.⁷ Combining temporary construction jobs and permanent operation jobs shows that present unemployment might reduce by 2,462. Obviously, if a reliable unemployment estimate (specifying occupations, willingness to work, and possibilities for re-training) and a year-by-year schedule of the proposed project were available then estimation could be made more precise.⁸ The illustrative calculation is summarized by Tables 1 and 2.

This represents a possible total population increase of 14,206 people on the island by the time the project is completed – presumably in relatively few years.

It is emphasized that the estimate approximate in view of the considerable remaining ambiguity with respect to costing, timing, and occupancy of the project, and unemployment, training, infrastructure costs, as well as other projects underway on the Island. Varying these data suggests that the increase in the permanent population of the Island induced by the Seroe Colorado proposals could be between 8 and 18 thousand.

3. Other Technical Remarks

This section reviews the some aspects ERA calculation of economic viability.

The data appear to be generic, possibly based on US costs rather than on Aruba wage rates, productivity, performance, ADR, etc. etc. The source of these data is not discussed. Studies like PKF, Horwath, and the information in the Framework and in the 2001 NTC report at least provide estimates based on Caribbean/Aruba experience. Figure 1,

⁷ This unemployment figure was cited at the NTC 2004 so is presumably the most reliable available, and is somewhat higher than the figure of 3,000 used in the 2003 Framework.

⁸ The impact would also depend on whether other major projects are undertaken, notably the proposed doubling of the Valero Refinery which might entail as many as 2000 refinery and sub-contractor jobs and up to 3 times that many indirect jobs.

reproduced from the report, indicates the estimated variation in total (discounted direct and indirect contributions) in household and public revenues for a variety of properties.⁹

It is strange that ERA use US construction costs. They say “actual costs will vary” which is the whole point – different types of resort, hotel, etc. offer very different opportunities – hence the need to do a much more careful analysis.

It is not explained why the Boutique hotel with a higher occupancy and room rate than the golf hotel should be marginally profitable.¹⁰ The hotels are attributed the same construction cost per room despite the fact that only 30% of revenue is from other expenditures (eating-in, etc) for the Boutique hotel, compared to 50% for the Golf Hotels. Moreover, average occupancy in Aruba is typically higher than assumed by ERA. The alternative illustrative calculation presented later clarifies such issues.

The cost excludes land costs. For most hotels in prime locations (e.g. in the US or EU, this can be very significant. Since the sites in Seroe Colorado are very desirable locations, and Aruba is a proven resort, the government should either have developers pay the assessed value or impose a comparable land tax.¹¹ Otherwise, the Island is “giving itself away”.

Golf Viability.(ERA Table 2 and Table 3).

The calculation of golf course also appears to be based on “standard” data without specific reference to Aruba costs.

⁹ There appear to be some modest arithmetic errors in the ERA Table 1. For example, it is difficult to average \$245, \$100, and \$411 to arrive at \$364 as an average room rate (even after weighting by the number of rooms).

¹⁰ A number of studies show that full-service hotels have fared less well than average since 1911.

¹¹ The assessed value can be calculated statistically if necessary.

The calculation of golf course viability is based on \$100/round. ERA does not justify the rate but it is probably what the market will bear (for example, it matches the current rate charged to transient visitors at Tierra del Sol).

However, 25% of rounds are from “other Island locations. If these 25% are Arubans then typically the rate would be lower at \$50/round, as would be the off-peak rate for tourists. Thus, the average rate per round will be lower and could reduce Revenue by \$2 million, which in turn reduces the Indicated Value to \$43.4 million. In any case, the outcome is very sensitive to the conversion factor etc. as shown in ERA Table 4.

ERA use a different (in my opinion better) approach to estimating commercial viability of the golf course from that for hotels. The calculation also is very sensitive to discount rates and horizons. Also the project has two phases and each will take some time to reach capacity so the start-up income may be considerably lower.

The situation of Tierra del Sol is not referred to. It is my understanding that there have been a variety of financial difficulties with TdS over the years. At the very least there are lessons to be learned about pricing that the local market will bear, room-to-round conversion, water use, etc. There must be lessons to be learned that would improve the analysis. The new Divi golf course also might provide current information on investment costs.

There may be adverse consequences for existing facilities. ERA say that 25% of the market for the new courses will be local. This represents 50% of a single 18-hole course. If all this is a transfer from TdS, this course may become insolvent - thus removing the golf facility at on the Palm Beach Tourism strip. Presumably the Hyatt and other classy hotels that market their properties as having nearby golf links would be pretty upset. An alternative, less likely, outcome might be that Aruba becomes known as a “golf island” so that there are agglomeration effects across the four golf courses.

Residential Developments (ERA Table 5).

The paper presented at the 2001 NTC conference showed that land intensive residential developments with only occasional occupancy can be a disaster from a revenue point of view.

The proposed homes are very expensive – again, it is strange that ERA use US construction costs. There needs to be a discussion of market need, how this will impact other home prices for current residents and newcomers. Without this, the calculations in Table 5, etc become ambiguous. The full infrastructure costs associated with the projects are not detailed (p10).

Revenue Prospects (ERA Table 9 on).

There are a many issues on the revenue calculation that require detailed review such as those described in the 2001 NTC report and revised for the new Framework.

The outcome depends on many factors – for example, whether the new homes are substitutions for old homes, their age and income profile, and how many of the occupants are already resident on the island (in which case some present taxes will be lost and this affects the estimated public service costs in ERA Table 14 etc. etc.).

It is unlikely that any hotel project could be successful without this additional infrastructure, and since the ERA/Sasaki proposal would more than absorb all the capacity proposed for San Nicholas in the Tourism Framework, it the full amount should be included as part of the public cost.

4. Alternative Viability Calculation

This section sets out an alternative estimation of the viability of the properties described by ERA. It does not represent an alternative proposal – simply a modified basis for evaluation. It shows how arbitrary are the ERA estimates of room prices, property costs

and profitability, and the importance of basing such calculations on the performance of similar properties in Aruba rather than generic data.

The calculation in ERA for the prototypical hotel development sets room rates so that the property “break even”.¹² It uses a variant of the widely used Hubbart Formula for the average room rate required in order to generate an expected profit level.¹³ Generally, calculations of project viability proceed in the reverse direction calculating profits as the residual of income minus demand. The Hubbart Formula offers a comfortable way to mask this problem to mask the sensitivity of profitability to small changes in assumptions about room rates, occupancy, construction costs, operating costs, etc. and may be popular for this reason. It is therefore a reasonable way to present information only provided all other performance factors are also reasonable. Given that in practice room rates in hotels are generally determined from demand – i.e. the price that the market will bear, rather than a mark-up on costs - the actual margin will generally be quite different from the “reasonable” NOI (net operating income) rate of profit used in the ERA formula. Especially in a resort such as Aruba that clearly carries a premium with visitors because of factors outside the hotel (beaches, friendliness, weather, safety, etc.) and has a high year-round occupancy, profitability typically must be comparatively high.¹⁴

Other methods for assessing the viability of hotel developments estimate room rates from the cost of construction per room. For example, standard texts (e.g. *Tourism Economics* by Lungren et al, 1985) suggest various approximate ways of estimating investment, such

¹² Break even analysis determines the price at which the operating costs (both fixed and variable costs) are covered but no profit earned.

¹³ The Hubbart Formula calculates the revenue required to meet an expected profit (return on investment), given various cost assumptions - to establish the average room rate required in order to generate an expected profit level. See e.g. Nicolaas, H. *Setting Rates the Right Way*. Price Waterhouse. BCMCRA Conference. October 1997. The method typically calculates the ADR as follows. Required rooms department revenue = Desired Profits + Income taxes + Management Fees + Fixed Costs + Undistributed operating expenses +(-) Non-room departmental losses (profits) + Direct expenses of the rooms department. . Schmidgall, R. 1991. *Managerial Accounting for the Hospitality Industry*, Fourth Edition, Michigan State University

¹⁴ The premium measures the contribution of the destination to the attractiveness of a resort over and above the standard of its accommodation. Aruba appears to measure well in both categories. Caribbean Travel & Life Magazine awarded Aruba in three categories: Best All Around Destination; Friendliest People; and Best Nightlife and Conde Nast Traveler graded Aruba among the seven top destinations in the Caribbean. Caribbean Travel named Hyatt Aruba as the Best Mega Resort and Conde Nast selected the Aruba Marriott from 700 other hotels as the "best place in the world to spend a vacation".

as the “\$1000 rule” – a room that will fetch \$100 per day will require \$100,000 of investment, and so on. A comparison of available data for Aruba suggests that the ratio of room cost to daily room rates is well below one thousand.¹⁵

Thus, the preferred calculation should estimate profitability as the residual of income minus costs. Income should recognize explicitly the contribution and profitability from each component (rooms, food, meetings, concessions, etc., etc.) and the premium arising from the overall desirability of a resort. Investment costs should take account of both the quality and the mix of service offered. Moreover, there is substitution between in-hotel and outside-hotel services and dining. Thus, the higher performance of a full service hotel should be balanced against the contribution to local restaurants and other business. Ultimately, this will lead to a higher multiplier effect in the wider economy and generate higher household income for residents and more recoverable public sector revenues.

An illustrative alternative calculation that might replace the ERA’s Table 1 effort is given in Table 3 below. For purposes of illustration, the calculation parallels the ERA sequence and figures. The calculation assumes a room rate based on the type of visitor and style of tourism. The room rates for the Golf and Convention hotels are as proposed by ERA. The room rate for the Boutique hotel is reduced to match the Golf hotel. This is more in keeping with the kind of smaller boutique hotel envisaged in the Framework modeled on the 100-room Bacuti and 20-room Boardwalk and similar successful properties in other resorts rather than the chain version of the boutique hotel. Two properties matching the ERA total of 232 rooms are indicated, providing some variety between properties for eating and other services. An additional smaller scale variant is also shown, where properties might be clustered so as to share some dining and other services.

The base investment cost is set by the “1000 rule” with an adjustment for the share of other services provided within the hotel. The additional expenditure is “backwards

¹⁵ The figure used here is illustrative only. Preliminary analysis based on incomplete data suggests a premium of up to 100%. Obviously the ratio depends on many factors since hotels were constructed or expanded at different times, offer different services (e.g. all-inclusive), and rates in any year depend on a variety of factors. A more reliable figure might be obtained from existent data.

engineered” from the ERA calculation so that room investment per room for the Golf and Convention hotels matches the ERA figures, and the investment for the Boutique hotel is similar.¹⁶ The difference in the latter is because a slightly lower share of “revenue from rooms” is used. Clearly, the amount of in-house dining and so on will depend on a variety of factors – quality, accessibility, alternatives, variety, and so on.

The ERA calculation appears to understate potential occupancy which in Aruba averages 75-80%. Moreover, Aruba is a relatively attractive resort (compared to other Caribbean destinations with similar accommodation), in part because Aruba has above-average living standards (and hence labor costs), but especially because the Island is especially attractive to visitors (who consequently are prepared to pay a premium for comparable accommodation). The premium of 25% used here reflects room rates across comparable properties in the Caribbean rather than on room rates relative to construction costs in Aruba.

The average occupancy of all hotels is increased from 70% to 75%. This is more reasonable (but still conservative) for all types of new properties in Aruba and the NOI margin (net operating income) is increased accordingly.¹⁷ Again, for purposes of comparison, the relative profitability for rooms, services, and conference facilities is based on the ERA figures. Some allowance is made for variable costs (the additional labor and materials input from higher occupancy). This increases margins by a few percent.

The outcome shown in Table 3 may be compared with ERA Table 1. All properties more than break even at the room rates used.¹⁸ Indeed, the Golf and Conference Hotels show a significant surplus (net margin) over and above the ERA NOI – entirely due to the higher occupancy. This is the amount over and above interest and other charges. It is not clear

¹⁶ To raise the 1000 rule up to the construction costs used by ERA requires that dining and other facilities cost 85% of rooms for similar usage (i.e. accounting for occupancy and dining-in rates). This is quite generous: a more reasonable figure might be 30%.

¹⁷ It is noted that in the IDAS (1981) Tourism Plan an average occupancy of 80% was argued to be essential before new accommodation was approved.

¹⁸ With the premium set to zero and occupancy to 70%, the results match the ERA calculation.

from the ERA calculation whether taxes are included in margins but such matters apart this is the amount available for reinvestment locally, subject to taxation, with the balance repatriated overseas.¹⁹

The income side of the ERA calculation depends critically on the relative level and profitability of rooms versus food and beverages in each property. Thus, the principle reason that the Golf and Convention hotel show a higher rate of return is because dining and convention facilities are taken to have a higher margin than rooms and a high proportion of guests dine-in.²⁰ Conversely guests at Boutique hotels will spend a higher proportion of their income outside the hotel. The amount of this dining-out has been calculated for each type of hotel based on room rates and dining-out propensity: spending per room from Boutique hotels is twice that from the Golf hotel and three times that from the Convention hotel. This shows that, with the Boutique hotels, a greater proportion of visitor spending is likely to be distributed into the wider community. This is an important consideration since one clear purpose of the Framework in recommending tourism at Seroe Colorado was to promote development in San Nicholas and environs, through tourism spending, jobs, and local entrepreneurship. This is shown in Table 4.

This is only the beginning of the story since the smaller Boutique hotels and different recreation and dining are more likely to purchase inputs via local merchants and have construction undertaken by local contractors. Thus, for a given amount of spending by visitors there will be greater indirect income. Overall, this illustrative calculation, based on quite conservative assumptions, together with those in earlier sections, suggests that ERA/Sasaki should rethink the scale, composition, costing, and timing of their proposals.

¹⁹ A Horwath 1994 study indicated an exceptionally high marketing cost for international hotels in Aruba.

²⁰ Here one might expect a Convention hotel to have a higher dining-in and services rate than a Golf hotel.

Table 1. Illustrative Settlement of Construction Workers for Resort, Homes, and Infrastructure

Construction	\$m Investment	Construction
Phase 1 (60%)	\$213	600
Phase 2 (40%)	\$157	442
Homes	\$625	2,386
Infrastructure	\$100	71
Temporary Workers	.	3,499
Migrant %	80%	2,790
Permanent Settlement	30%	837
Plus Family Members	1.5	1,255

Table 2. Illustrative New Permanent Residents from Golf-Hotel-Resident Complex.

Factor causing Settlement	Workers	Migrant %	Migrant Jobs	Resident s/Unit	New Residents	Residents/ Home	Housing Units
Hotel Induced Jobs (excluding Construction)	4,611	80%	3,710	1.5	5,565	2.5	2,226
New Homes Induced Jobs (excluding Construction)	3,628	80%	2,919	1.5	4,378	2.5	1,751
Total	8,239		6,629		9,944		3,978
Temporary Construction Jobs	1,267	2.5	507
Residence in New Homes		90%	-		2,995	2.5	1,331
Total					14,206		5,682

Table 3. Illustration of Alternative Occupancy and Pricing.

Seroe Colorado		Illustration of Alternative Costing		
ERA Table 1 Alternative	Golf Hotel	Conference Hotel	Boutique Style	Boutique Cluster
Rooms/Hotel	378	482	116	58
Number of Hotels	1	1	2	4
Rooms	378	482	232	232
ADR \$	\$245	\$150	\$275	\$250
% Revenue from Rooms	50%	60%	70%	80%
Occupancy %	75%	75%	75%	75%
Combined Revenue/Room Day	\$368	\$188	\$295	\$234

Aruba/Hotel Premium	20%	20%	20%	20%
Cost Reduction	83%	83%	83%	83%

Operating Costs

Room Share of Spending/Day	\$184	\$113	\$206	\$188
Room Operation Costs @70%	81%	81%	81%	81%
Marginal Rate	50%	50%	50%	50%
Rooms Costs \$	\$121	\$74	\$136	\$123

Dining-in Spending/Day	\$184	\$75	\$88	\$47
Food Operations Cost @70%	65%	50%	65%	65%
Marginal Rate	80%	80%	80%	80%
Food Operations Costs \$	\$96	\$30	\$46	\$24

Total Operating Costs/Room \$	\$216	\$104	\$182	\$148
Daily Gross Margin/Room \$	\$151	\$83	\$113	\$87
Pre Tax Margin %	41%	45%	38%	37%
ERA NOI Margin	28%	32%	24%	24%

Capital Costs

Cost/Room \$k (\$1000 rule)	\$245	\$150	\$275	\$250
Cost/Room \$k (Modified \$1000 rule)	\$204	\$125	\$229	\$208
In-Hotel Service Investment	43%	34%	26%	17%
Adjusted Cost/Room \$k	\$291	\$168	\$288	\$244
Stabilized Cap Rate	10%	10%	10%	10%
Annual Capital Cost \$k	\$29	\$17	\$29	\$24
Daily Capital Cost \$	\$80	\$46	\$79	\$67

Daily Net Margin	\$71	\$38	\$34	\$20
"Excess" Return on Capital	9%	8%	4%	3%

Table 4. Comparison of in-hotel and outside spending.

Outside Spending	Golf Hotel	Conference Hotel	Boutique Style	Boutique Cluster
All Food/Room	120%	100%	120%	120%
Total Food \$/Day	\$294	\$150	\$330	\$300
Share Food Outside	38%	50%	73%	84%
Food Outside Hotel \$/Day	\$110	\$75	\$242	\$253
Shopping etc/Hotel and Food	100%	80%	100%	100%
Hotel + Food	\$539	\$338	\$625	\$534
Shopping, Recreation and Services	\$539	\$270	\$625	\$534
In-Hotel	\$368	\$188	\$295	\$234
Outside Hotel	\$711	\$420	\$955	\$834
Total	\$1,078	\$608	\$1,249	\$1,069

Figure 1. Native and Non-Native Arubans by Birth Year 1991-2070
(Aruba Framework for Sustainable Tourism Development – Proposed Scenario)

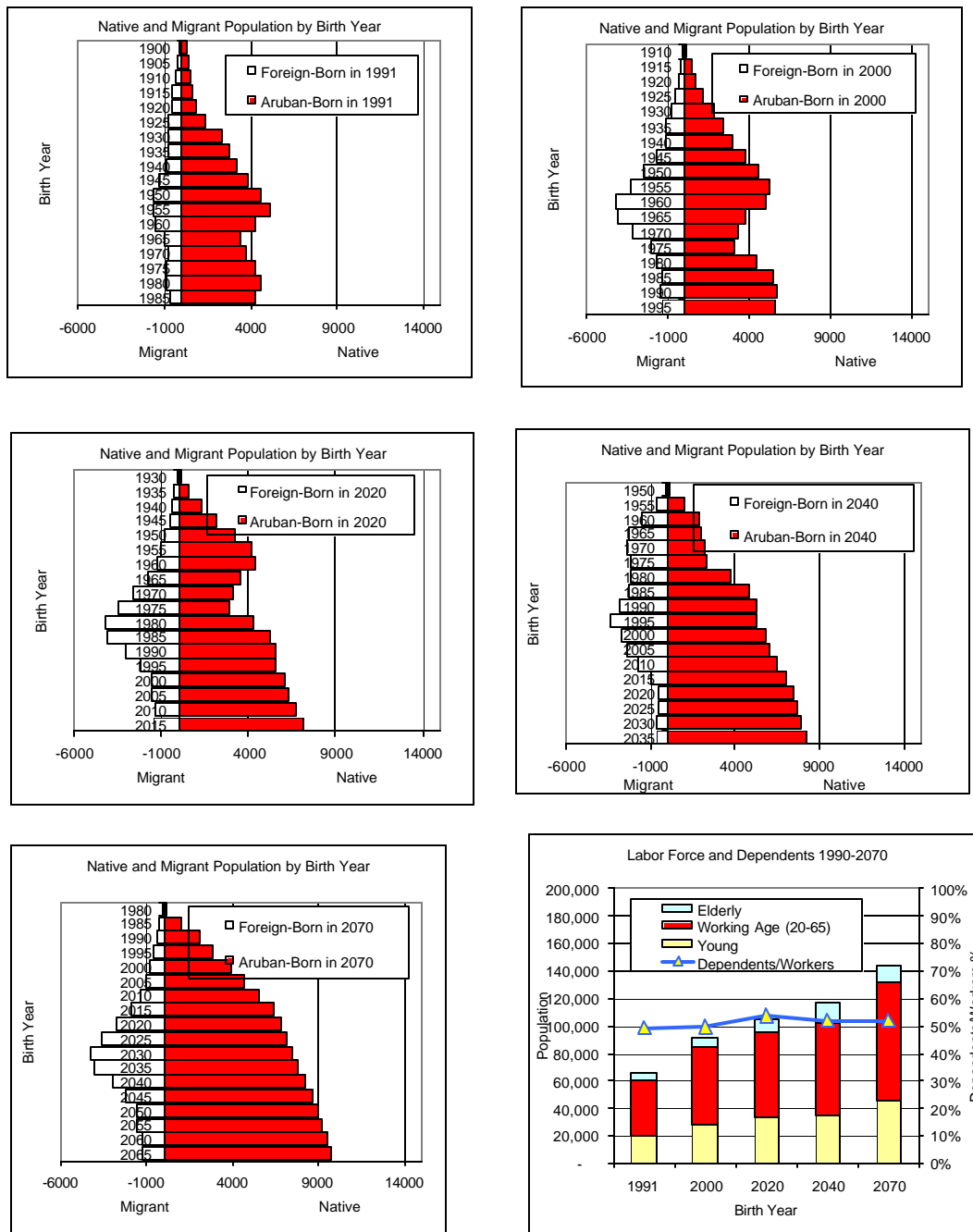


Figure 2. Trends to 2070 for Aruba Framework for Sustainable Tourism Development – Proposed Scenario.

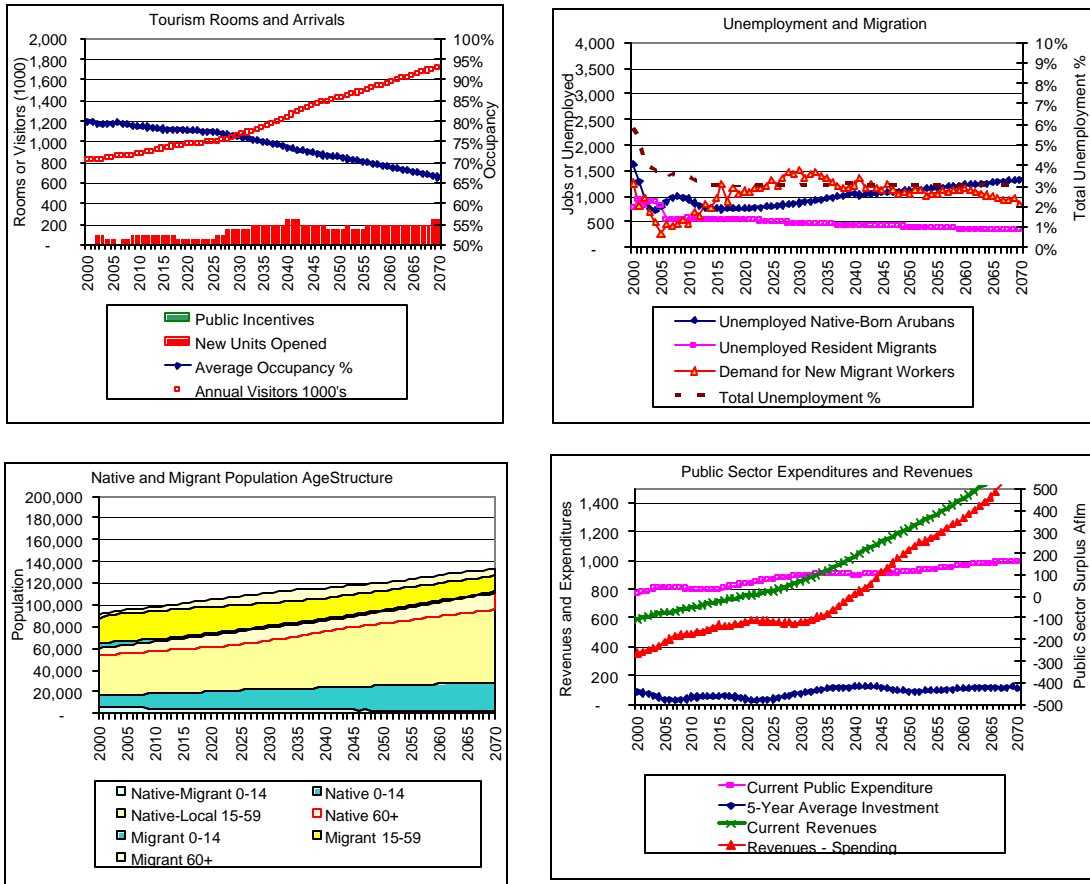


Figure 3. Native and Non-Native Arubans by Birth Year 1991-2070

Past Policy Continues with All Current Expansion and Golf Resort Proposals plus Rescue Package after 2040

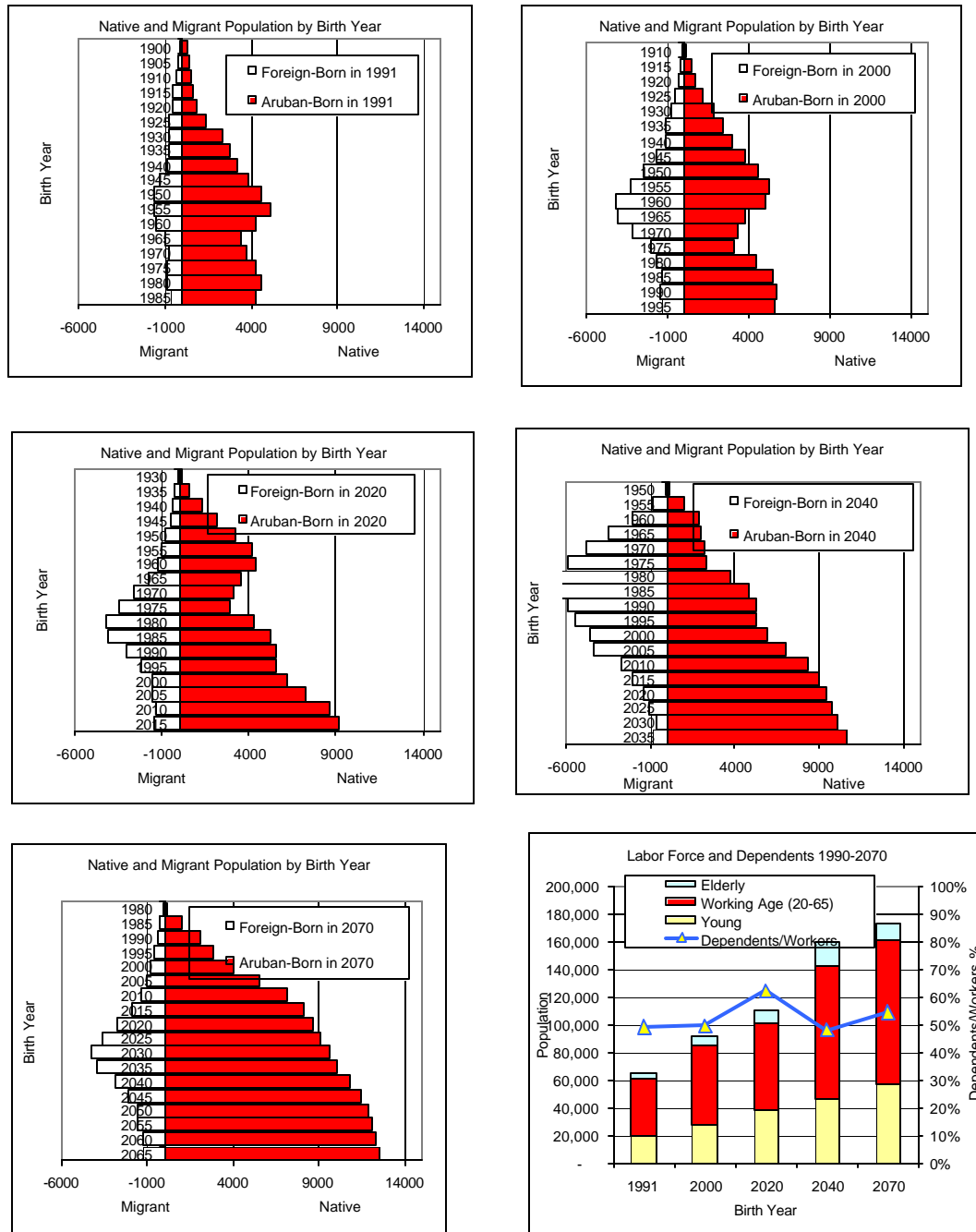


Figure 4. Past Policy with All Current Expansion and Golf Resort Proposals plus Rescue Package

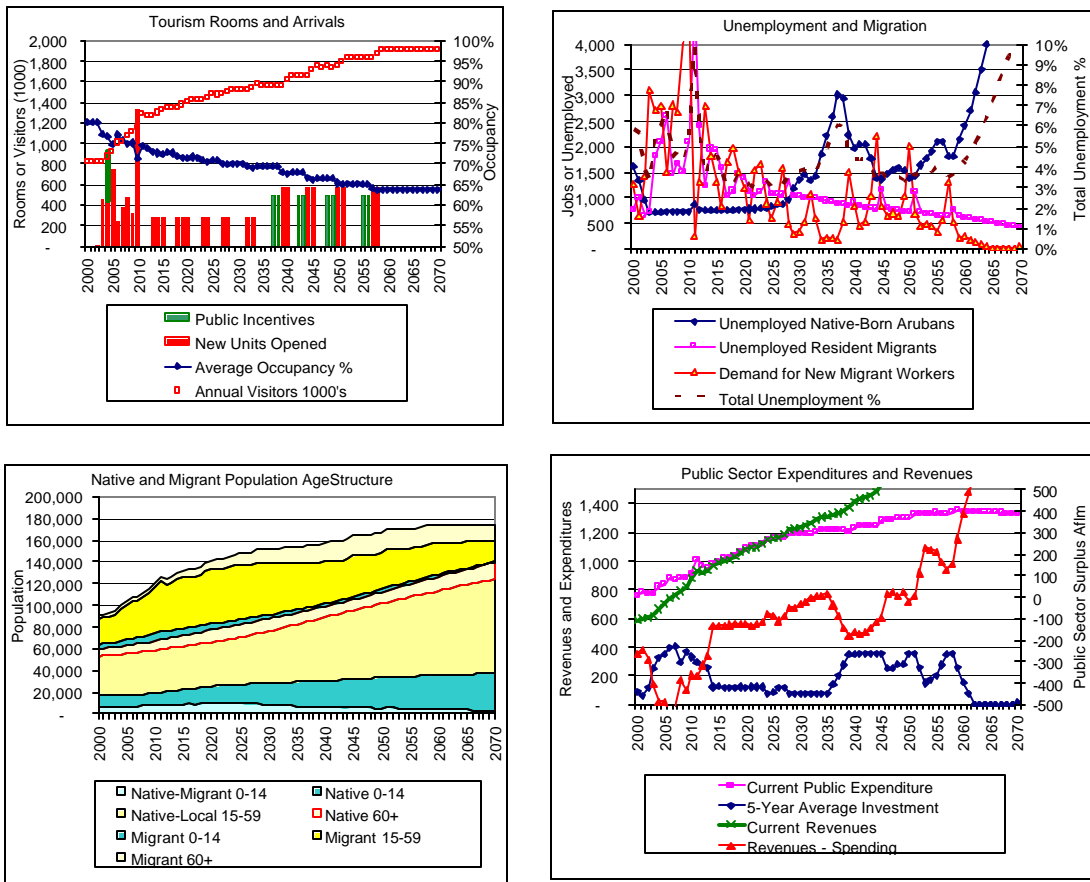


Figure 5. The Economic Contribution of Alternative Accommodation Styles

